

Application No. 10/634,918
Reply dated September 12, 2005
Response to Office Action dated June 10, 2005

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-11. (cancelled)

12. (withdrawn) A two-stroke cycle engine, comprising:

a scavenger passage which connects a scavenging port on the side of the cylinder to the crank chamber inside the crankcase, and goes through the mounting surface where the cylinder and crankcase are attached to each other; and

a removable guide with a surface forming a curved smooth channel which is attachable to said scavenger passage in the crankcase from the mounting surface, and forms a portion of said scavenger passage with the curved channel.

13. (withdrawn) A two-stroke cycle engine according to claim 12, wherein said removable guide comprises a positioning tooth which engages with the hole in the gasket for the mounting surface where the cylinder and crankcase are attached to each other.

14. (withdrawn) A two-stroke cycle engine according to claim 12, wherein said removable guide is fixed to the crankcase when a tooth engages in an indentation in the crankcase.

15. (withdrawn) A two-stroke cycle engine according to claim 12, wherein said removable guide has a depression in the mounting surface where the cylinder and crankcase are attached to each other.

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16. (withdrawn) A two-stroke cycle engine according to claim 12, wherein said removable guide is painted on.

17-18. (cancelled)

19. (withdrawn) A two-stroke cycle engine according to claim 17, wherein said blow-up angle α varies in step fashion from a location nearer intake port (α_2) to said blow-up angle nearer exhaust port (α_1).

20-27. (cancelled)

28. (new) A two-stroke cycle engine, comprising:

a cylinder having a scavenging port and a scavenging passage communicating with the scavenging port; and

a crankcase including front and rear portions that are separated by a plane, which is at a right angle to a crankshaft and contains an axis of the cylinder, wherein the front and rear portions are attached to each other by fasteners, wherein each of the front and rear portions includes a recess on an outer area of the said portion near the axis of the crankshaft, wherein each of the front and rear portions includes a scavenging passage which provides fluid communication between the scavenging passage of the cylinder and a crank chamber of the crankcase so as to allow a fuel-air mixture to flow from the crank chamber to the scavenging port, and wherein the cylinder is attached by fasteners to a mounting surface on the crankcase.

29. (new) A two-stroke cycle engine according to claim 28, further comprising an air passage which intersects the plane and supplies air from an air cleaner to the scavenging passage of the cylinder, and wherein the air passage is connected to middle portions of the scavenging passage of the cylinder.

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30. (new) A two-stroke cycle engine according to claim 28, wherein the cylinder includes a second scavenging port and a second scavenging passage communicating with the second scavenging port, wherein the two scavenging passages of the crankcase are connected to the two scavenging passages of the cylinder, respectively, to provide fluid communication between the scavenging ports of the cylinder and the crank chamber of the crankcase so as to allow a fuel-air mixture to flow from the crank chamber to the scavenging ports, and wherein the scavenging passages of each of the cylinder and crankcase are arranged symmetrically along a front-to-rear plane of the engine.

31. (new) A two-stroke cycle engine comprising:

a cylinder including a scavenging port on its side;

a crankcase including front and rear portions that are separated by a plane at a right angle to the crankshaft, which plane contains an axis of the cylinder, wherein the front and rear portions are fixed to each other at the plane by fasteners to form an integral crankcase, wherein each of front and rear portions has a recess on its outer area near the axis of the crankshaft, and wherein the cylinder is attached by fasteners to a mounting surface of the crankcase; and

a scavenging passage which connects the crankcase with the scavenging port to supply a fuel-air mixture from the crankcase to the scavenging port, wherein said scavenging passage runs through the crankcase and the cylinder.